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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,569	12/22/2003	Jeffrey D. Rupp	FGT 1852 PA	1568

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EXAMINER

HERNANDEZ, OLGA

ART UNIT	PAPER NUMBER
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2144

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/707,569

Applicant(s)

RUPP, JEFFREY D.

Examiner

Olga Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12/22/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-7, 9, 12, 15-18, 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Morizane et al (2002/0026274).

As per claims 1 and 9, Morizane discloses a single vision sensor having a position with coordinates on the vehicle, detecting at least one object, and generating at least one object detection signal; and a controller coupled to the vision sensor and generating a safety system signal in response to the coordinates and the at least one object detection signal (paragraphs [0002]-[0004], [0069], [0079], [0098]-[0100] figures 1-2, 5, 7, 10, 11, 14, 15, 18, 23, 28).

As per claim 2, it is inherent that in a camera uses a two-dimensional system.

As per claim 3, Morizane discloses the use of a camera (paragraph [0003])

As per claims 4 and 18, Morizane discloses an adaptive cruise control task in response to the safety system signal (paragraph [0003]).

As per claim 6, Morizane discloses the vision sensor relative to a hoodline of the vehicle (figures 2A-2C).

As per claims 7, 15, 16 and 17, Morizane discloses determining the size and up-angle of the at least one object and in response thereto determining the range of the at least one object (paragraphs [0004], [0054], figures 1, 2, 5, 7, 10, 11, 14, 15, 18, 23, 28).

As per claim 12, Morizane discloses reducing traveling speed of the vehicle when height and width of the object appear to increase in size (figures 1, 2, 1018, 23).

As per claims 11 and 20, Morizane discloses a single vision sensor having a position with coordinates on the vehicle, detecting at least one object detection signal; and a controller coupled to the vision sensor determining size and up-angle of the at least one object in response to the coordinates and the at least one object detection signal, and in response thereto determining range of the at least on object; wherein the controller reduces speed of the vehicle in response to the range (paragraphs [0002]-[0004], [0069], [0079], [0098]-[0100] figures 1-2, 5, 7, 10, 11, 14, 15, 18, 23, 28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morizane et al (2002/0026274) in view of Hirabayashi (5,874,904).

As per claims 5 and 10, Morizane does not teach determining the position of the vision sensor relative to a predetermined reference on the vehicle. However, Hirabayashi teaches determining the position of the vision sensor relative to a predetermined reference on the vehicle (column 1, lines 60-67, column 2, lines 1-13). Thus, it would have been obvious to one skilled in the art to combine Morizane's invention with Hirabayashi's position in order to detect dangerous approach from different vehicles.

As per claim 8, Morizane does not teach a memory coupled to the controller and storing the information regarding the position. However, Hirabayashi teaches it in figure 24. Thus, it would have been obvious to one skilled in the art to combine Morizane's invention with Hirabayashi's memory in order to detect dangerous approach from different vehicles.


As per claims 13 and 14, Morizane does not teach determining object parameters and generating a signal in response to the object parameters. However, Hirabayashi teaches it in column 3, lines 30-53. Thus, it would have been obvious to one skilled in the art to combine Morizane's invention with Hirabayashi's parameters in order to detect dangerous approach from different vehicles.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is 571-272-7144. The examiner can normally be reached on Mon-Thu 8:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'OH' with a large loop at the end, positioned to the left of the printed name.

Olga Hernandez
Examiner
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